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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/046,677
Filing Date: March 24, 1998
Appellant(s): FURUKAWA ET AL.

H.J. Staas
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/24/05 appealing from the Office action mailed 7/20/04.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,569,634	AMADASI et al.	3-1971
5,864,607	ROSEN et al.	1-1999
5,898,756	MANNING et al.	4-1999
6,208,966	BULFER	3-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 1 – 6, 8 – 13, and 15 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,898,756 (Manning et al.) in view of US 5,864,607 (Rosen et al.), US 3,569,634 (Amadasi et al.), and further in view of US 6,208,966 (Bulfer).

Appellant's argument focuses on claim 1, stating that the remaining claims inherit the limitations of claim 1. Therefore, examiner will address only claim 1.

Regarding claim 1, Manning et al. teaches a system and associated method of a parallel connected dialing signal transmission inhibiting device 100 (Fig. 1 of Manning et

al.) for data transfer over a telephone link, wherein a device 710, 730, 720, 740 (Fig. 3 of Manning et al.) may be connected to a telephone 30 or 32 (Figs. 1 and 3 of Manning et al.) for the purpose of inhibiting DTMF signals going through or suppressing those signals to a central office 5 (Figs. 1 and 3 of Manning et al.) when those DTMF signals are indicative of controls or simply any signal that should <u>not</u> be passed on to the central office for processing. Manning et al. teaches that this could include the ability to control various household devices or appliances via a standard telephone unit or for programming of the actual phone as for example, speed dial, or even for the purpose of invoking special telephony features on that phone as for example, the above-mentioned speed dial. The above mentioned DTMF signals need <u>not</u> be processed by central office 5. (Abstract, Figs. 1 – 5B, Col. 1, line 53 – Col. 3, line 35 of Manning et al.)

Manning et al. accomplishes this by teaching a device 100 having therein a tone/signal generator 300, read as the claimed DTMF generator unit, for generating tones to be sent to a central office if so needed, and a DTMF/tone detector 210 and a microprocessor 400, which taken together or alone, detect when DTMF signals come either from the telephone network and represent an actual call or whether they are control signals coming from telephone unit 30 or 32, read as the claimed command signal recognition unit. (Abstract, Fig. 1, Col. 4, lines 14 – 50, Col. 7, lines 10 – 42 of Manning et al.) Manning et al. further teaches a microprocessor 400 and various electrical components such as relays, resistors, signal amplifiers, and capacitors for switching between having the telephone unit connected to a telephone network or not. (Col. 4, lines 4 – 61, Col. 7, line 10 – Col. 12, line 12 of Manning et al.)

Note that Manning et al. also teaches distinguishing between predetermined DTMF valued signals which are different from network DTMF signals, such as two pound signals (##) followed by other signals to indicate a control signal as opposed to simple 7 or 10-number DTMF signals which indicate a dialed/received telephone number, i.e., a network DTMF signal. (Col. 7, line 43 – Col. 8, line 55 of Manning et al.) In fact, calls from the network can come in to check, for example, voice mail or check messages on an answering machine. In this common scenario, the system MUST be able to differentiate between signals from the network and those from the telephone unit, and such is usually done by having different predetermined values for various DTMF signals, or else the system becomes confused or has interfering feature interactions.

Also, as seen above, microprocessor 400 has various functions and again, it alone or the system 100 as a whole has the functionality of the claimed telephone service processing unit because it is the determination made by microprocessor 400 that allows control signals in system 100 to pass through to the desired device(s) to control them. Although Manning et al. does not describe separate elements or groups of elements having certain functions as in the present invention, as discussed above, Manning et al. teaches that system 100 and its elements have all the claimed functionality.

What is not taught by Manning et al. is an actual <u>open circuiting</u> of lines and blocking command signals completely. Rather, Manning et al. teaches <u>attenuating</u>

DTMF signals on lines via a switchable a.c. load. (Col. 4, line 21 – Col. 6, line 38 of Manning et al.)

However, Amadasi et al. teaches a blocking device for open circuiting a telephone line from the telephone device to the telephone exchange/network when a prohibited number is dialed. That is, Amadasi et al. teaches opening a circuit to inhibit DTMF signals from going through to the exchange or central office 5. (Abstract, Fig. 1, Col. 1, lines 1 – 4, lines 20 – 42, and lines 57 – 60, Col. 2, lines 68 – 75, Col. 4, lines 6 – 11 of Amadasi et al.) The purpose and effect of attenuating a signal to the point that it cannot be recognized or picked up by the network is the same as open circuiting the telephone or data processing device

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have selected a method of open circuiting the telephone unit from the network as taught by Amadasi et al. in the Manning et al. system, because either method effects the same result. Manning et al. teaches an invention whereby control/programming/etc. signaling is inhibited so that a central office will not receive or comprehend DTMF signals or interpret DTMF signals to be dialing digits, when in fact those DTMF signals are, in the case of voice mail usage, the claimed voice recording or playback processing, or credit card calling, or 1-800 / 1-900 calling, read as the claimed telephone number entry processing, or even selecting a transmission message and broadcasting that message, read as the claimed file transmission processing, etc. (Col. 2, line 51 – Col. 3, line 46, Col. 7, line 43 – Col. 8, line 55 of Manning et al.).

Moreover, see the Abstract of Manning et al. wherein it is taught that "*...transmission-inhibiting device is disclosed which detects DTMF signals across tip and ring conductors of a telephone link and switches in an a.c. load that attenuates the dialing signals by at least 30dB. This prevents action in response to the DTMF signals by a central office servicing the telephone link, thereby allowing commands-data to be transmitted within the home telephone wiring*." This is exactly the purpose of the claimed invention that Manning et al. reads on.

Also, note that command signals in Manning et al. are sensed by the dialing of for example, two ## signals followed by and digit, as noted above. Therefore, if the two ## signals are not first detected by the system of Manning et al., then those DTMF signals are not blocked, which of course means that Manning et al. teaches selective inhibition only of DTMF signals.

Furthermore, the invention of Manning et al. is operable as a standard telephone system allowing incoming and outgoing calls. Even answering machines, which allow a caller to call their home telephone number to which an answering machine is connected and listen to messages stored thereon, allow for commands to be transmitted to the telephone unit to control the machine. Therefore, because an incoming call is recognized as coming from the telephone network, Manning et al. as well, can recognize between network non-command DMTF signals and command-DTMF signals which do come from the network. Any standard telephone system is able to distinguish between such signals when certain dialing codes are used such as when a # signal is dialed to start the dialing string, whether from a unit or to a unit (e.g., from the network).

Finally, note that if a device is open circuited from a telephone exchange/network, any DTMF signals will be completely blocked from being transmitted to or received from the telephone exchange / network, as taught by Amadasi et al. Because Manning et al. already teaches selective inhibition, it is merely the open-circuiting aspect of inhibition of Amadasi et al. that is relevant to the obvious combination. In other words, the blocking device of Amadasi et al. reads on the claimed line switching unit and is merely a variation on the relay SW1 of Manning et al. through which, depending on whether it is open or closed, effects attenuation or allows signals to pass.

Interpreted in one manner, Manning et al. teaches controlling a data processing device because Manning et al. teaches the ability to control thermostats for example, and many electronic thermostats can be considered simple data processors.

Interpreted in another manner however, Manning et al. does not teach a data processing device being controlled or utilized via a telephone unit for telephony purposes, wherein that data processor is the more recognizable computer.

However, Rosen et al. teaches communication with a computer using telephones, wherein a device allows DTMF tones from a telephone unit to be used to control telephony communication service or communication software resident on the computer, while allowing communication to and from a telephone network when need be. (Abstract, Figs. 1 – 5, Col. 1, line 26 – Col. 3, line 15, Col. 4, line 4 – Col. 12,line 48, Col. 16, line 1 – Col. 17, line 28 of Rosen et al.)

Manning et al. and Rosen et al. both teach the use of a telephone for controlling a separate appliance, Manning et al. being limited to household appliances or the telephone unit itself. It would have been obvious to have extended the invention of Manning et al. to include controlling telephony services on a computer inasmuch as computers can be considered to be simply another separate household appliance, and as taught by Rosen et al., it is useful to be able to control computers via telephone units for ease of operation, for convenience, remote operation, etc. (Col. 3, lines 6 – 15 of Rosen et al.)

Note that the invention of Rosen et al. functions in a slightly different manner than the invention of Manning et al. with respect to how signals are inhibited and how communication is achieved between computer and telephone, i.e., Rosen et al. teaches the use of voice recognition/commands via the telephone unit whereas Manning et al. teaches the use of DTMF tones for control. However, it is very well known in the art to convert voice into DTMF tones for specifically the purpose of using voice commands as taught by Bulfer. (Abstract, Fig. 1 and 2, Col. 1, line 13 – Col. 2, line 46, Col. 3, line 10 – Col. 5, line 24) Furthermore, it is very well known in the art that many systems already convert voice into DTMF signals as this was once the only way for voice recognition commands to be implemented and recognized by telephonic systems.

Regarding claims 2 and 11, interpreted in one way, it is inherent or would be very obvious to have a unit or two separate converter units, as the multiplication of elements performing the same function has no inventive function, for the purpose of separating DTMF from voice signals as claimed in the present application. One simple example is

when one would not want to send voice to the microprocessor 400 of Manning et al. when programming it if it is not required. Obviously, only the DTMF control signals are necessary. Furthermore, if one were to send voice and DMTF tones simultaneously, a system would either never be able to detect what signals are for control or which actually comprise, for example, a conversation, or if it could, it would be counter-intuitive to not separate them as DTMF and voice signals many times have different functions.

Another example is when listening to a voice message on voice mail for example, controlling the voice mail features, such as navigating through the voice messages occurs simultaneous or at least in close conjunction with the listening of voice. Therefore, the separation of data and voice signals is necessary. Remember that Manning et al. teaches the ability to control and listen to voice mail, as discussed above.

Furthermore, Manning et al., as discussed above already teaches the ability to distinguish between telephone unit signals and telephone network signals, as well as receive and transmit such signals. Therefore, separating the converter units in a telephone unit and telephone network portions is merely a design choice or preference that results in the same functionality because there are two converter units merely to deal with signals associated with either the telephone unit or telephone network.

(10) Response to Argument

As to appellant's arguments regarding claims 1, 10, and 16 – 20, the motivation to combine Manning et al. and Amadasi et al. is stated in the above rejection, i.e., that either attenuating a signal or open-circuiting a line both result in a system wherein the

signal cannot reach the telephone network or central office. Clearly, as seen by the date of the Amadasi et al. reference, it is extremely old and well known to open-circuit a line to prevent signals from reaching the network or central office. Manning et al. then, can still be obviously modified to use an open-circuiting method because Manning et al. too, requires the prevention of signal transmission.

One of ordinary skill may be motivated to select the technique of opening the circuit over the technique of attenuating the signal in order to minimize the already low chance of having central office 5 in Manning et al. receive and possibly respond to the attenuated DTMF signals. That is, sending no signal may possibly have an advantage over sending merely attenuated signals.

Appellant seems to be confused between a 35 USC 102 and 103 reference. If a single reference could be found that teaches selectively inhibiting signals from being transmitted to the telephone network, a 103 rejection would not have been applied. However, because Manning et al. already teaches selective inhibition of signals, the only difference or leap that must be made between the present invention and Manning et al. is the exact technique used for inhibition. As described above, Amadasi et al. teaches open-circuiting as a method of signal inhibition. Because it is a known technique of signal inhibition, one of ordinary skill in the art would have known to employ either open-circuiting (send no signal) or signal attenuation (send attenuated signal).

Note that on page 5 of Appellant's brief, it is asserted that the circuit in Amadasi et al. completely blocks any signal when a user attempts to make a prohibited call, and

thus it would be impossible to allow transmission of the DTMF command signal to the data processing device. Appellant is interpreting the combination as if Amadasi et al. was the primary reference, but it is not. Again, Manning et al. already teaches the selective aspect to inhibiting a signal, Amadasi et al. merely provides another well known technique. Even if Amadasi et al. were the primary reference, the combination could still be effected because signal inhibition is the purpose and teaching of both Manning et al. and Amadasi et al.

Furthermore, appellant seems to be asserting that there is some patentable advantage to open-circuiting a line as opposed to attenuating signal so that it is as if the line were open-circuited. However, appellant has shown no advantage nor is one ever discussed in the specification. In fact, in the summary of the claimed subject matter in appellant's appeal brief, pages 2 - 3, appellant fails to even mention "open-circuiting." What appellant deems important is merely that a signal is inhibited so that certain DTMF signals can be sent between a telephone unit and a device, excluding the telephone network. This at least partly supports examiner's contention that the end result of signal inhibition is of import, not whether that technique of signal inhibition is through attenuation or through open-circuiting.

Parts of appellant's arguments regarding claims 2 and 11 have been addressed in the above rejection.

Note however that appellant directs examiner to page 18, lines 3 – 8 of the specification but this portion of the specification has no relevance to either a first or second converter unit.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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